What is aspiration?

- Aspiration happens when food, liquid, or other material enters a person’s airway and eventually the lungs by accident. It can happen as a person swallows, or food can come back up from the stomach.
- Aspiration can lead to serious health issues such as pneumonia and chronic lung scarring.
- Aspiration pneumonia is known as a ‘silent killer’ and it can become deadly without many symptoms. People prone to aspiration have reduced cough reflexes, so they may not notice themselves choking or induce a cough when they aspirate.
- Choking is a significant concern for someone with swallowing issues. It is the fourth leading cause of death by unintentional injury. Learning about prevention can help save a life.

General symptoms

Symptoms may occur after the person eats, but can also occur over time. Some people show no signs of aspiration.

- Feeling that food is stuck in the throat or coming back into the mouth
- Pain or trouble when swallowing
- Fever after eating
- Coughing or choking while eating or drinking
- Chronic chest congestion
- Wheezing, or wet cough
- Shortness of breath
- Fatigue while eating
- Chest pain
- Extra “clearing” attempts
- Aversion to eating because of the choking sensations
- Look of panic, coughing, gasping, inability to vocalize, turning pale
- Waking up coughing, choking, or gasping
- Drop in blood oxygen saturations while eating

Prevention

- Follow doctor’s orders for diet, supervision, and eating plan
- Maintain good dental care by brushing and flossing regularly, and seeing a dentist
- Take medications as prescribed
- Do not smoke
- Avoid food and drink before lying down – stay upright at least 30 minutes after eating
- Slow down when eating, and avoid talking while eating
- For individuals who have had a swallow study (especially if they have a neural-muscular disorder), they should have a new study periodically to see if anything has changed
- Do not leave someone alone during mealtime if they are in the high-risk
How is Aspiration Diagnosed?
- Listening for decreased air-flow, rapid heart rate, and crackling sounds in lungs
- Chest x-rays
- Sputum culture
- Bloodwork
- Bronchoscopy
- CT scan
- Modified barium swallow test
- Endoscopy

Treatment
- Swallow study
- Medication
- Diet changes (i.e. thickened or no liquids)
- Texture changes such as ground or pureed food

Eating plan:
- Position changes while eating
- Not eating while lying down
- Supervised eating
- No distractions during meals
- Using straws
- Stimulating foods such as carbonating drinks or adding spices
- Slow person down when eating – encourage small bites
- Provide smaller, more frequent meals for those with acid reflux

• Aspiration pneumonia can cause breathing problems that may require supplemental oxygen, steroids, or a breathing machine. Severe aspiration pneumonia may require hospitalization. Antibiotics may be prescribed.
• Depending on the cause and severity of the aspiration, a feeding tube may be required.

How to Respond to a Choking Victim
- If someone is choking or not breathing, take immediate action. Call 911 and start CPR or Heimlich maneuver.
- If the person is coughing forcefully, encourage them to continue coughing to clear the object.
- If the person cannot cough, speak, or breathe, their airway may be completely blocked. Call 911 and take necessary action.
- If the person is gasping or choking, attempt the Heimlich maneuver.
- If the person has no pulse, begin CPR.
- Document any aspiration or choking events and inform the person’s doctor. Document what was happening before the event, what symptoms appeared, and for how long.

Seek help right away for someone who may have aspirated or choked. Even if they have stabilized, report it to their doctor. They may not be 100% clear, were injured by the food or hurt during the applied first aid. Aspiration pneumonia can develop days later.

Sources & Resources
- Aspiration from Dysphagia, Cedars-Sinai
- Choking Care Provider Bulletin, Developmental Disabilities Administration
- Choking: First Aid, Mayo Clinic
- Dysphagia: How to Help a Loved One Eat and Drink Safely, AgingCare
- What is CPR, American Heart Association